N° 1238 A.D. 1901

Date of Application, 18th Jan., 1901

Complete Specification Left, 6th Sept., 1901—Accepted, 18th Jan., 1902

PROVISIONAL SPECIFICATION.

"Improvements in Self-acting Combined Spittoons and Washbowls or the like Principally for Dental Purposes"

I, LESTER FRED LERCHNER of Kantstrasse 5, Berlin, W. in the Empire of Germany, Doctor of Dentistry, do hereby declare the nature of this invention to be as follows:

The present invention relates to a self-acting sanitary spitoon which can also be used as a wash-bowl and the walls of which serve as a reservoir or tank. Water is caused to enter the said bowl by means of a hollow fixed stopper which is provided with an air tight valve. When the said valve is closed the water remains in the tank, and when the valve is opened the water flows into the bowl through openings in the lower part of the reservoir or tank. The said reservoir must also be provided with an ordinary or pneumatic tap which is used when water is required for washing purposes, that is to say when the outlet at the bottom of the bowl has been closed and the latter is to be used as a wash bowl or the like.

This construction has the special advantage as compared with ordinary spitoons more particularly for dental purposes, that the necessity of providing a separate wash-bowl is obviated. Further by closing the outlet opening of the bowl and opening the valve stopper the cleansing of the bowl is facilitated. To the tap a cup may be attached so that a separate support for the latter is rendered unnecessary. To facilitate the emptying of the waste receiver the latter is supported by a plate resting upon rollers, the said plate being connected with the door of the pedestal in such a manner that when the said door is opened the said receiver is moved forward.

The bowl or spitoon is supported at the upper part of the pedestal and the upper walls of said bowl are formed by a tank or reservoir which may be made in one piece with the bowl or may be removable. The said reservoir is provided with one or more small openings through which water introduced into the reservoir through a suitable opening can pass into the bowl or spitoon when the hollow air-tight valve stopper of the said opening is open. A short india-rubber tube preferably leads downwards from the outlet opening at the bottom of the bowl. Inside the pedestal a waste receiving vessel stands upon a plate which is connected with the door of the pedestal and provided with a roller or rollers or the like so that on opening the said door the vessel is moved out of the pedestal and *vice versa*.

In details the construction of the spitoon may vary, the whole of the lower part of the bowl may form the waste receiver and be provided with a tap. To the inner side of the door of the pedestal a towel rail or the like may be fastened and the pedestal may be provided with drawers or other convenient devices.

Dated this 18th day of January, 1900.

HERBERT HADDAN & Co.,
Agents to Applicant.

[*Price 8d.*]

COMPLETE SPECIFICATION.

Improvements in Self-acting Combined Spittoons and Washbowls or the like Principally for Dental Purposes.

I, LESTER FRED LERCHNER, Kantstrasse 5, Berlin. W. in the Empire of Germany do hereby declare the nature of this invention and in what manner the same is to be performed to be particularly described and ascertained in and by the following statement:—

The object of the present invention is an improved wash-bowl or spittoon serving dental and all purposes and especially meeting all sanitary requirements. The essential and new idea of the invention is the exceedingly original way of filling the basin of the wash-basin or cleaning the spittoon, *i.e.* by means of compressed air or a simple pressure on an air compressing ball, that drives the water or disinfecting fluid through little apertures in the above edge of the wash-bowl or spittoon, so that the same floods the sides and cleans them. This effect is also obtained by a slight modification. By opening a valve on the edge of the above part the water by its own natural pressure *i.e.* by the pressure of the air, enters the basin through little holes in the lower part of the same. Both means for filling or cleaning the sides of the basin can be applied together, so that the water flows in from above and below at the same time. To obtain the above mentioned effects, the wash-bowl or spittoon is made hollow-sided so as to form two water chambers, which can be filled by removing the pressing ball and the valve. The water used for washing or cleaning purposes leaves the basin by an opening or a pipe in the lower part of the same after removing a stopper.

The accompanying drawings illustrate the new object of which.

Fig. 1 is a vertical section.

Fig. 2 is a vertical section of a modification,

Fig. 3 a view from above,

Fig. 4 a slightly enlarged section on the line *x*—*x* Fig. 3,

Fig. 5 a slightly enlarged section through *y*—*y* Fig. 3.

Fig. 6 a side and upper view of a catch for teeth and cotton.

Referring to the drawings, the wash-basin or spittoon is divided into two parts A and B by a partition *a*, of which the upper part A is provided with double sides *b*, *c*. In the centre of both parts is a waste-pipe *d* which can be closed by a stopper *e* and leads to a receptacle *f* below. The parts A and B serve as water chambers. The side *c* of the chamber A near to the rim is provided with more or less small openings *g* extending all around. To the apertures *g* small pipes *o* are connected that lead to the lower chamber B. In the lower part of *c*, near the waste-pipe *d* also small holes *h* are arranged both openings, *g* as well as *h*, serving as passages for the water in the chambers to enter the basin.

The upper chamber A is provided with a further passage *i* from which a pipe *j* leads to the lower chamber B and thus connects the upper with the lower chamber and by which the the lower chamber can be filled with water. To the pipe *j* in the passage *i* an air pressing ball *k* is fastened air tight. The rim of the chamber A is provided with a further opening *l* by which the upper chamber can be filled and which can be closed air-tight by an ordinary valve *m*. The wash basin or spittoon, as well as receptacle for waste water, can be carried by any convenient stand, or as in the present case by a three legged standard *n*.

When in use the apparatus works as follows:

After the air pressing ball *k* together with the pipe *j* has been removed, the lower chamber B is filled with water and then again closed air tight. The upper chamber A is filled in the same way by opening the valve *m* after closing the pipe *d* by the stopper and the passage *h* by any convenient means. After filling this chamber, the valve is again closed air-tight so that the stopper in the passage *h* can be removed. If it is desired to cleanse or fill the wash basin or spittoon by the water issuing from the holes in the upper rim the ball *k* is pressed and consequently the air in the lower chamber B compressed for which reason the water is pressed through the pipes *o* and sent forth from the holes *g* to wash away any particles sticking to the sides of the spittoon or wash basin. It is obvious, that when the stopper *e* is fixed to the waste pipe *d*, the wash basin or spittoon will be filled with water for the purpose desired. To effect the filling or cleansing of the basin from below, the ball *k* is not pressed but the valve *m* opened so that the water by its natural pressure *i.e.* by influence of the air pressure from out-side, forces its way through the passage *h* in the lower part of the basin and fills the same. It is also obvious that by pressing the ball *k* and opening the valve *m* at the same time, the basin will be filled or cleaned from above and below at the same time. The air pressing ball *k* is provided with an aperture *p* by which the same fills itself with air in the ordinary way after being pressed and therefore cannot suck up water if not desired. The said aperture is of course closed by the hand or finger when the ball is pressed to drive the water through the holes *g* in the manner already described.

Below the ball *k* the pipe *j* can be provided with a cock *q* so that the water can be taken from the chamber B directly. This is done by pressing the ball down, so that the extending pipe *j* sucks up water; and discharges same through said cock. Fig. 2 represents a modification by which the described process can be accomplished more automatically. A and B again represent the upper and lower water chamber, *g* the holes in the rim of chamber A, *i* the passage leading through chamber A to B., *o* are the pipes connected to said holes *g*, not leading to the lower chamber, but only to the bottom of the upper chamber A., *d* is the waste pipe connecting the basin with the receptacle *f* receiving the waste water. Below the receptacle *f* a chamber for compressed air is arranged *i.e.*, in which the air can be compressed in the ordinary way, for instance, by attaching an air pump to opening *t*. From the air compressing chamber *s* a pipe or hose *u* leads to a cock *r* on the upper chamber A. When the cock is opened the compressed air enters the chamber A and forces the water through the pipes *o* and holes *g* in the manner and for the purpose already described. It is obvious, that in this case the air compressing chamber only takes the place of the air compressing ball, which latter can replace the same. In this construction only the upper chamber A serves to fill or clean the basin, whereas the water in the lower chamber is kept for other purposes. It is drawn off through the cock *w* under which a glass *z* may be held by a bracket *y*. The passage *i* in this case, only serves to fill the lower chamber B. c^1 is an exchangeable basin cover having the exact form of the basin so as to fit close. The rim of the cover fits just below the holes *g*, so that the water can strike its sides. This cover can be removed or exchanged for cleaning purposes, so that the wash basin or spittoon will always look neat and clean.

Fig. 6 represents a catch for pulled teeth and cotton which is hanging in the waste pipe. The catch is made of a wire-net with two arms extending sideways by means of which the whole net is held as seen in Fig. 2. It may be mentioned that the holes *g* can be so arranged as to let the water out side-ways as seen in Fig. 1 so that the sides are struck by full force assuring thorough cleaning. The removeable receptacle *f* Fig. 1 can be emptied by opening the cock in the lower end and can also be provided with a glass-tube visible from out-side to have a strict control and prevent the waste-water from flowing over.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed I declare that what I claim is:—

1. In an improved wash-bowl or spittoon the arrangement of double sides forming a water chamber between them, a partition parting the same into an upper and lower chamber, the upper chamber near the upper rim being provided with a number of holes in a circle all around, from which small pipes lead nearly to the bottom of the lower water chamber an air-compressing ball fixed air-tight in an opening in the rim from which a pipe leads nearly to the bottom of the lower chamber, substantially as and for the purpose described.

2. In an improved wash-bowl or spittoon the arrangement of double sides forming water-chambers between them, a partition parting the same into an upper and lower chamber which latter is provided with one or more passages leading to the interior of the wash-basin or spittoon just above the waste pipe closable by a stopper connecting the basin with a receptacle for the waste water below, a valve on the rim substantially and for the purpose described.

3 In an improved wash-bowl or spittoon as claimed in Claim 2 the arrangement of a chamber with compressed air, a hose or pipe connecting the same with the upper chamber substantially as described. with reference to Fig. 2 of the drawings.

4. In an improved wash-bowl or spittoon the arrangement of an upper and lower water chamber, the upper chamber near the upper rim being provided with a number of holes, small pipes leading from these to the bottom of the upper chamber an air compressing ball fixed air tight in an opening of the upper chamber, a pipe leading from this opening to the lower chamber, a hole arranged in the said ball a water cock connected to the pipe leading from the ball to the lower chamber substantially and for the purpose described.

5. In an improved wash-bowl or spittoon, the arrangement of water chambers, a partition parting them into an upper and lower chamber, a waste pipe connecting the basin with a receptacle below a stopper arranged in the said waste pipe, one or more passages arranged above said stopper, a water cock fixed to the lower end of the receptacle, a glass with fixture in the above part of the same substantially and for the purpose described.

6. In an improved wash-bowl or spittoon, the arrangement of an upper and lower water chamber, the upper chamber being provided with a number of holes in a circle around the rim, small pipes leading from these holes to the lower part of the upper chamber, a chamber with compressed air connected with the upper water chamber, a passage leading through the above water chamber to the lower, a waste pipe connecting the wash-basin with a receptacle for the waste water, and which waste pipe can be provided with a catch for pulled teeth or cotton, an exchangeable coverer filling in the wash-basin or spittoon substantially and for the purpose described.

Dated this 6th day of September 1901.

WHEATLEY & MACKENZIE,
40 Chancery Lane, London, W.C. Agents.

Redhill: Printed for His Majesty's Stationery Office, by Malcomson & Co., Ltd.—1902.

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A.D. 1901. JAN. 18. Nº 1238.

LERCHNER'S COMPLETE SPECIFICATION.

(1 SHEET)

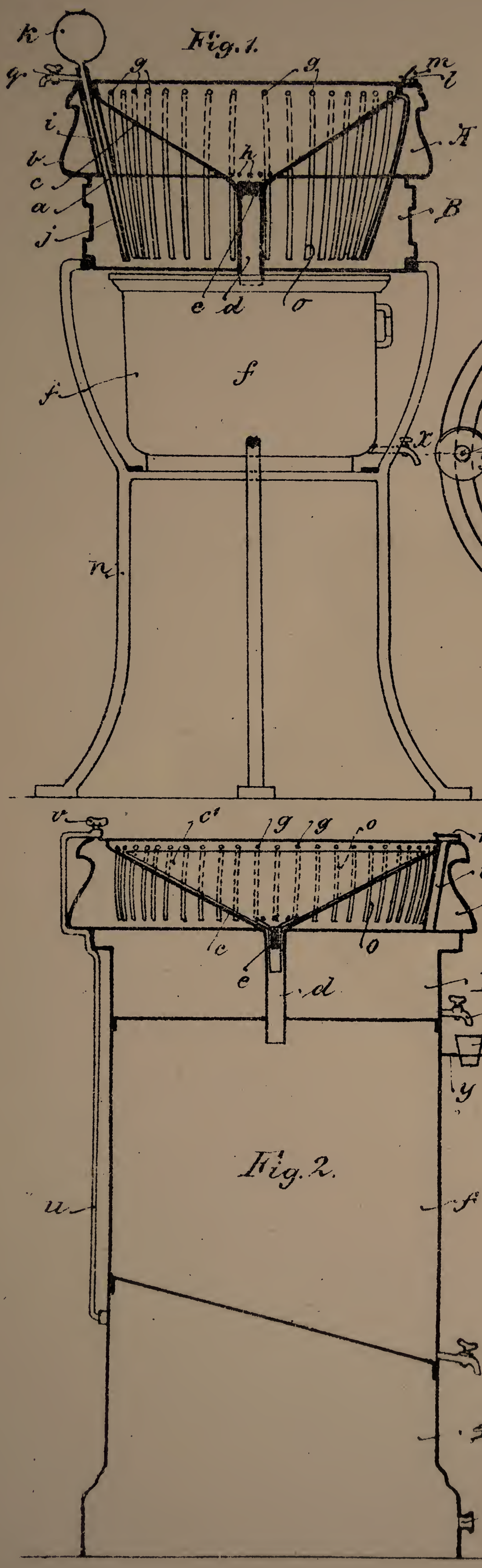

Fig. 2.

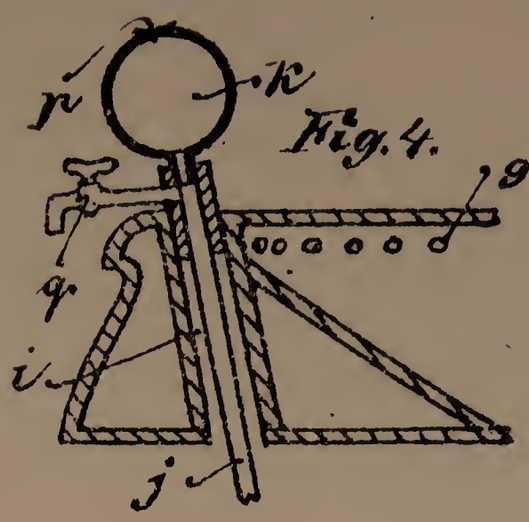

Fig. 4.

Fig. 3.

Fig. 5.

Fig. 6.

[This Drawing is a reproduction of the Original on a reduced scale.]

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